

Adobe® Flex™ 2 and Adobe Flash® Player 9

Frequently Asked Questions

Adobe Flex 2 Overview

Q: What is Adobe Flex 2?

A: Adobe Flex 2 is a complete application development solution for creating and delivering cross-platform rich Internet applications (RIAs) within the enterprise and across the web. It provides a modern, standards-based language and programming model that supports common design patterns and includes an Eclipse based development environment, advanced data services; and a fast, enterprise-class client runtime based on the ubiquitous Adobe Flash Player. Flex enables enterprises to create engaging, interactive, expressive applications that dramatically enhance user experience, increasing customer satisfaction and user productivity.

Q: What are the components of Flex 2?

A: The Adobe Flex 2 product line consists of the following:

- Adobe Flex Builder 2: Eclipse-based IDE
- Adobe Flex Charting 2: Extensible library of rich charting components
- Adobe Flex Builder 2 with Charting: IDE with charting library
- Adobe Flex Data Services 2: Infrastructure for managing data integration and application communication
- Adobe Flex 2 Software Development Kit: Free Core application framework and command-line tools for Flex development

Q: What kinds of applications can be built with Flex 2?

A: Flex 2 enables application developers to create engaging, interactive, expressive web-based applications. For example, a data visualization application built in Flex can pull data from multiple back-end sources and display it visually. Business users can drill down into the data for deeper insight and even change the data and have it automatically updated on the back end. A product configuration application can help customers navigate the process of selecting or customizing products online. And a self-service application can guide customers through an address change or help employees complete an otherwise complicated multi-step benefits enrollment.

Q: What is the easiest way to start building Flex applications?

A: The fastest, easiest way to get started is to use Flex Builder 2. Alternatively, users can download the Flex 2 SDK, which provides the core Flex application framework and is available for free. It provides the Flex standards-based programming model, rich Flex component library, and integrated data access services. The Flex SDK enables developers to create Flex applications using another IDE or their editor of choice. Please see the section on developer resources to learn more about ways to quickly learn about developing with Flex.

Q: Do I need to install the Flex SDK if I use Flex Builder?

A: No. When you install Flex Builder, you automatically get the Flex framework and everything you need to start building Flex applications.

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A: No. When you install Flex Builder, you automatically get the Flex framework and everything you need to start building Flex applications.

Q: Do I have to use Flex Builder to build Flex applications?

A: No. However, most developers will find it more productive to use the Flex Builder IDE to design their applications.

Q: What kinds of Flex applications can be built using only Flex Builder?

A: Using Flex Builder, you can create applications that have a rich and dynamic interface with visual transitions. Developers can build simple data connections using XML and web services. More data-intensive applications requiring high performance, real time data synchronization and collaborative capabilities would require Flex Data Services 2.

Q: How is Flex 2 different from Macromedia Flex 1.5?

A: Flex 2 provides a more productive Eclipse based development environment, dramatically improved application performance, support for new classes of applications such as those that require real-time data push, and more fine-grained control over application look and feel. ActionScript 3.0 significantly simplifies programming, while Flex Data Services 2 provides a robust, productive solution for data-intensive applications, including automatic paging for large data sets, data synchronization, and more. Finally, any developer can obtain the Flex SDK to begin development at no charge and utilize Flex Data Services Express to deploy smaller production applications free of charge.

Q: Can Flex 1.5 applications run on Flex 2?

A: Applications developed using previous versions of the Macromedia Flex framework can continue to run without change using Adobe Flash Player 9. Flex 2 utilizes ActionScript 3.0, and therefore will require a recompile if modifications are needed. Applications will also need to be updated to take advantage of the new features of Flex 2.

Q: Which version of Flash Player do Flex 2 applications require?

A: Applications developed with the Flex 2 product line require Flash Player 9. Developers can implement Flash Player Express Install to provide users who have Flash Player 6.0 or later with a smooth, in-context upgrade to version 9.

Pricing and Support

Q: What is the pricing structure for Flex 2?

A: Adobe direct pricing for the components of Flex 2 is as follows:

- Adobe Flex 2 SDK: Free
- Adobe Flex Data Services 2 Express (includes full production license for deploying a single application on a single CPU): Free
- Adobe Flex Builder 2: US\$499
- Adobe Flex Builder 2 with Charting: US\$749
- Adobe Flex Data Services 2: US\$20,000/CPU

Q: Can I get tryout version of Flex Builder and Flex Data Services?

A: You can download a free trial version of Flex Builder 2 and start building applications today. You also can use a free limited production version of Flex Data Services Express 2. This version will allow you to deploy a single application on a single, nonclustered CPU.

Q: How are Flex Builder and Flex Data Service licensed?

A: Developers can separately purchase Flex Builder 2, including the Flex framework, on a per-seat license model. Flex Data Services is licensed for use on the server in a CPU-based pricing model, although you can download a free, commercial limited-use version of Flex Data Services Express 2 for use on a single, non-clustered server.

Q: What languages and operating systems does Flex 2 support?

A: Flex 2 is available in English and Japanese. Flex Builder runs on Microsoft Windows 2000, Windows XP Professional, Windows 2000 Server, or Windows Server 2003. Flex Data Services runs on Microsoft Windows 2000 Server, Windows XP Professional, Windows Server 2003, Red Hat Enterprise Server 4, or SUSE Linux Enterprise Server 9 from Novell.

Flex and Ajax

Q: Can I use Flex with Ajax?

A: Flex 2 and Ajax technology complement each other well. Adobe developed a Flex Ajax bridge solution (FABridge) which helps integrate rich Flex components with Ajax applications. The FABridge is a small, unobtrusive library of code that you can insert into a Flex application, a Flex component, or an empty SWF file to expose it to scripting in the browser. It is being released to the community under an open-source license.

Q: What capabilities can Flex add to Ajax?

A: Flash and Flex technology can augment Ajax to overcome chronic browser limitations in offline data access, audio/video, vector graphics, high-performance data exchange, and message based publish/subscribe applications.

Flex Developer Support

Q: What resources are available to help developers quickly learn Flex?

A: To help developers immediately start building rich, expressive web applications, Adobe has made a variety of online and in person learning resources available through <http://developer.adobe.com/>. You can also start in the Flex section of the Developer Center at: <http://www.adobe.com/devnet/flex/>, and click on the Getting Started link.

Q: What does the Developer Center include?

A: The Developer Center includes articles, tutorials, samples, downloads, code, and much more to help developers get started and stay productive with Flex. From the site, developers can easily find relevant blogs, seminars and events, as well as links to resources for support, training and documentation.

Q: Is it easy to conduct a search on the Developer Center?

A: Yes. You can start a search on the left hand side of the developer center, which initiates a search through all the relevant Developer Center content, as well as technical support knowledge base items and tech notes. For direct access to search go to: <http://www.adobe.com/cfusion/knowledgebase/index.cfm>

Q: Are there other ways to find more information about Flex online?

A: Developers may subscribe to or view the Adobe Blog Aggregator at: <http://weblogs.macromedia.com/mxna>. The aggregator provides quick and easy access to blogs from Adobe employees and industry experts, as well as a wealth of knowledge from the community.

There are also forums and a number of mailing lists for Flex and other Adobe products. The Flexcoders list is one of the fastest ways to ask questions and receive answers from Adobe employees or community members. All of these resources are available on the community section of the developer center at <http://www.adobe.com/devnet/>.

Other resources include Flex documentation, available at: <http://www.microsoft.com/windowsserver2003/default.msp>, and the Flex Exchange for components and other downloadable code at: <http://www.adobe.com/exchange/>.

Q: What other community resources are available?

A: There are hundreds of Adobe user groups around the world, and new ones are starting up all the time to focus on Flex exclusively. You can locate a local user group at: <http://www.adobe.com/cfusion/usergroups/>
Finally, you can access a list of events, conferences, and seminars online or around the world. Please see the community tab on the developer center at <http://www.adobe.com/devnet/>.

Adobe Flash Player 9 Overview

Q: What is Adobe Flash Player?

A: Adobe Flash Player is a lightweight, secure, robust runtime environment for rich media and enterprise-ready rich Internet applications. Installed on over 600 million Internet-connected PCs and mobile devices worldwide, Flash Player, along with Adobe Reader, comprises the core client technology behind Adobe's Engagement Platform.

Q: When is Adobe Flash Player 9 available?

A: Users can download Flash Player 9 now from the Player Download Center at www.adobe.com/go/getflashplayer.

Q: What's new in Adobe Flash Player 9?

A: New features of this release include the ActionScript 3.0 language, based on the ECMAScript Edition 4 language proposal, and a new ActionScript Virtual Machine (AVM2), which dramatically exceeds the performance of previous players. AVM2 supports full runtime error reporting, industry-standard debugging, and binary socket support. The sandbox-based security model is further enhanced in AVM2 to safeguard sensitive data and ensure safe browsing for end users. Flash Player 9 also contains AVM1, which executes legacy ActionScript content. Other new language features include,

- ECMAScript for XML (E4X)
- Regular expressions
- Industry-standard W3C DOM Level 3 event model
- Namespaces and packages
- Enhanced debugging and profiling data
- Improved error handling and exceptions

Q: Is Flash Player 9 the target runtime for the next release of the Flash authoring tool?

A: Yes, the next release of the Adobe Flash Professional will target Flash Player 9.

Q: Will there be another major release of Flash Player with the next release of Adobe Flash Professional?

A: No, we do not plan to release another version of Flash Player with the next release of Adobe Flash Professional.

Q: What languages and operating systems does Flash Player 9 support?

A: Flash Player is available in English and localized versions and is offered for both Windows and Macintosh operating systems. For system requirements, please visit <http://www.adobe.com/products/flashplayer/productinfo/systemreqs>.

Q: Pricing and support?

A: Adobe Flash Player 9 can be downloaded free of charge at www.adobe.com/go/getflashplayer.

Support for Flash Player 9 is available at www.adobe.com/support/flashplayer.